

CLAIMS

WHAT IS CLAIMED IS:

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CONCL.

1. A high-speed image sensor comprising a plurality of signal converting means for generating electric signals according to an incident light intensity and a plurality of electric signal recording means for storing electric signals output from corresponding signal converting means,

wherein said electric signal recording means is linear shaped and provided with a read-out line for each of longitudinal sections thereof, the read-out line being used for directly reading out the electric signals out of a light receptive area.

2. A high-speed image sensor comprising a plurality of signal converting means for generating electric signals according to an intensity of electromagnetic waves or particle streams and a plurality of electric signal recording means for storing electric signals output from corresponding signal converting means,

wherein said electric signal recording means is linear shaped and provided with a read-out line for each of longitudinal sections thereof, the read-out line being used for directly reading out the electric signals out of a light receptive area.

claim 1

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3. The high-speed image sensor as in ~~claims 1 or 2~~,
 further comprising means for directly connecting said signal
 converting means with the ~~read-out~~ lines without passing
 through said electric signal recording means.

4. A high-speed image sensor comprising a plurality of
 signal converting means for generating electric signals
 according to an incident light intensity and a plurality of
 electric signal recording means for storing electric signals
 output from corresponding signal converting means,

wherein said signal converting means are disposed in
 all of or every other square or rectangular frames on a light
 receptive area; and

wherein a center line of said electric signal means
 is inclined with respect to a line connecting two positions
 where electric signals are input from two of said signal
 converting means adjacent to each other in an extension
 direction of said electric signal recording means to
 corresponding electric signal recording means.

claim 1

5. The high-speed image sensor as in ~~any one of claims~~
~~1 through 4~~, wherein said electric signal recording means
B3 CONT'D
 is a charge coupled device type electric signal recording
 means.

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CONCL
a 6. The high-speed image sensor as in any one of claims
1 through 4, wherein said electric signal recording means
is a MOS type electric signal recording means.

claim 1
7. The high-speed image sensor as in claims 5 or 6,
wherein each of said signal converting means is divided into
a plurality of portions insulated from each other.

claim 5
8. The high-speed image sensor as in claim 6, wherein
each of said signal converting means is divided into a
plurality of portions insulated from each other and wherein
plurality of amplification means for amplifying the electric
signals are interposed between said plurality of divided
portions and said electric signal recording means.

claim 5
9. The high-speed image sensor as in claims 5 or 6,
further comprising a cuttable band-shaped space which
continuously extends from one side to another side of the
light receptive area.

claim 5
10. A high-speed image sensor comprising a plurality of
signal converting means for generating electric signals
according to an incident light intensity and a plurality of
electric signal recording means for storing electric signals
output from corresponding signal converting means,

wherein each of said signal converters is divided into
a plurality of portions insulated from each other.

11. An image sensing apparatus comprising said high-speed
image sensor claimed in ~~any one of claims 1 through 10.~~

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